

**AN ALTERNATOR EQUIPPED WITH IMPROVED INTERFACE MEANS  
BETWEEN AN ENGINE CONTROL APPARATUS AND ITS REGULATOR  
CIRCUIT, AND A CORRESPONDING INTERFACE**

**ABSTRACT OF THE DISCLOSURE**

- 5 A motor vehicle alternator includes a regulator for varying excitation as a function of a reference variable, together with a conversion circuit for varying the reference variable (such as a voltage) according to a PWM signal. It includes, in combination: an internal clock with a controlled variable period; a difference circuit which produces a
- 10 difference signal between the period of the PWM signal and that of a signal from the clock; a control circuit which governs the internal clock in response to the difference signal in such a way as to equalise the periods of the internal clock signal and the PWM signal; and a conversion circuit which comprises a counter paced by the clock and
- 15 active while the PWM signal is at a given logic level, together with a D/A converter for converting the count from the counter into a voltage from which the regulator reference voltage is obtained.